

MINUTES OF MEETING

PG (Instrumentation & Control Engg.)

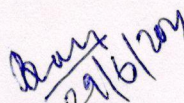
The internal BOS Meeting of the PG (Instrumentation & Control Engg.) held in the office of HOD (EIE) on dated 29th June, 2021 at 10.00 A.M.

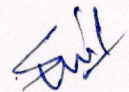
Agenda of the meeting was to update and map the CO-PO Matrix (including PSO's) and to review the core and elective list of subjects and finalize the scheme & syllabi.


The following members attended the meeting.

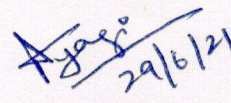
1. Dr. Sanjay Marwaha, Professor	Chairman
2. Dr. J.S. Dhillon, Professor	Member
3. Dr. A.S. Arora, Professor	Member
4. Dr. Surita Maini, Professor	Member
5. Dr. Manpreet Kaur, Professor	Member
6. Dr. Pratibha Tyagi, Assoc. Professor	Member
7. Er. Asim Ali Khan, Associate Professor	Member
8. Er. Sunil Kumar Bansal, Asstt. Profesor	Member
9. Er. Barasha Mali, Asstt. Professor	Member

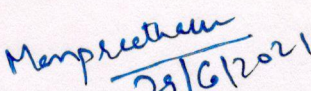
Prof. Surita Maini, who was assigned task to propose new subjects and update the CO-PO Matrix (including PSO's) as per the feedback received from the Faculty Members put up proposal for deliberation in BOS. After brain storming discussion the updated scheme (as enclosed) was finalized with mutual consensus.


Barasha Mali



Sunil K Bansal

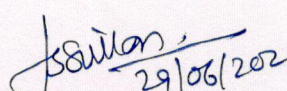

Asim Ali Khan

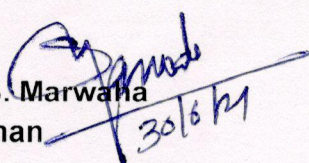

Dr. Pratibha Tyagi

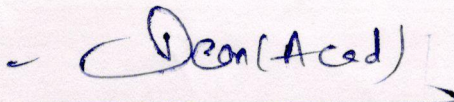

Prof. Manpreet Kaur


Prof. Surita Maini


Prof. A.S. Arora


Prof. J.S. Dhillon


Prof. S. Marwaha
Chairman


Dean (Acad)

Course Scheme for Post Graduate Programme
in
Instrumentation and Control Engineering



**Department of Electrical & Instrumentation
Engineering**

Sant Longowal Institute of Engineering & Technology
Longowal-148106
Phone: 01672-253119/253120 Fax: 01672-280057
Website: www.sliet.ac.in



M.TECH. (CONTROL AND INSTRUMENTATION ENGINEERING)

Semester-I							
S. No.	Subject Code	Subject Name	L	T	P	Hrs.	Credits
1	PCIE-811	Instrumentation System Design	3	0	0	3	3
2	PCIE-812	Non-Linear and Adaptive Control	3	0	0	3	3
3	PEIE-811	Core Elective-1	3	0	0	3	3
4	PEIE-812	Core Elective-2	3	0	0	3	3
5	CCIE-811	Research Methodology and IPR	2	0	0	2	2
6	ACIE-811	English For Research Paper Writing and Professional Communication	2	0	0	2	0
7	PCIE-813	Instrumentation System Design Lab	0	0	4	4	2
8	PCIE-814	Modelling and Simulation Lab-I	0	0	4	4	2
		Total	16	0	8	24	18
Semester-II (A)							
Sr. No.	Subject Code	Subject Name	L	T	P	Hrs.	Credits
1	PCIE-821	Industrial Process Control	3	1	0	4	4
2	PCIE-822	Advanced Bio-Medical Instrumentation	3	0	0	3	3
3	PEIE-821	Core Elective-3	3	0	0	3	3
4	PEIE-822	Core Elective-4	3	0	0	3	3
5	ACIE-821	Constitution of India	2	0	0	2	0
6	PCIE-823	Advanced Bio-Medical Instrumentation Lab	0	0	4	4	2
7	PCIE-824	Modelling and Simulation Lab-II	0	0	4	4	2
8	PCIE-825	Seminar	0	0	2	2	1
		Total	14	1	10	25	18
Semester-II (B)							
	Four weeks training in reputed industry/laboratory in Institutions of repute such as IITs, NITs, CSIR, DRDO, CSIO etc.					160	S/US
Semester-III							
Sr. No.	Subject Code	Subject Name	L	T	P	Hrs.	Credits
1	PEIE-911	Core Elective-5	3	0	0	3	3
2	OEIE-911	Open Elective	3	0	0	3	3
3	PCIE-911	Dissertation (Part-1)	0	0	20	20	10
		Total	6	0	20	26	16
Semester-IV							
Subject Code		Subject Name	L	T	P	Hrs.	Credits
PCIE-921		Dissertation (Part-2)	0	0	32	32	16
Total			0	0	32	32	16

Total Credits: 68

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LIST OF PROGRAM SPECIFIC/ CORE ELECTIVE COURSES

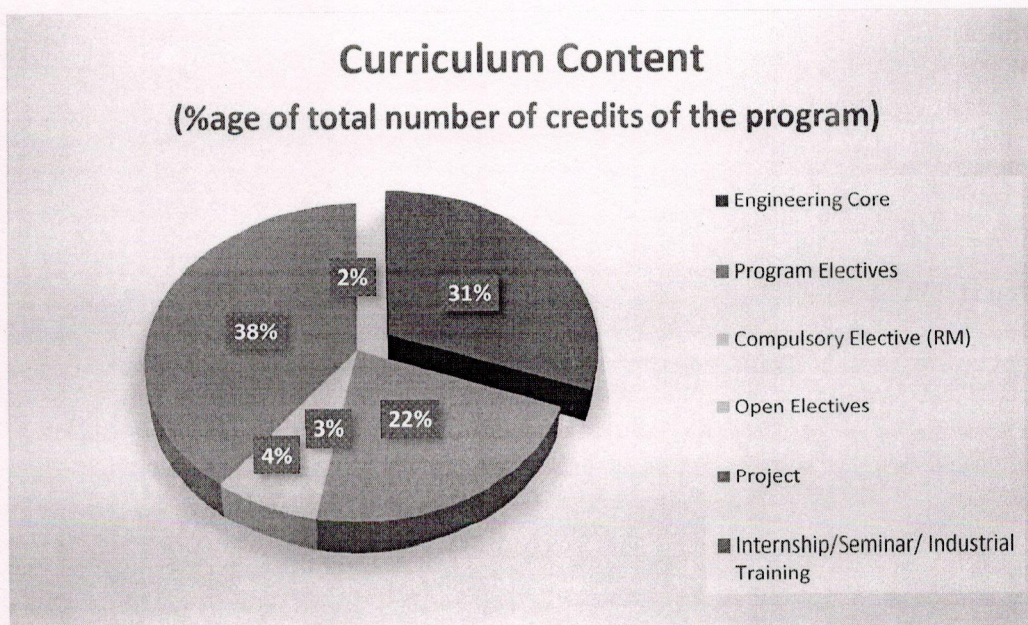
CORE ELECTIVE-1 (PEIE-811)		
Sr. No.	Subject Code	Subject Name
1	PEIE-811A	Data Communication
2	PEIE-811B	Microcontroller and Embedded Systems
3	PEIE-811C	Instrumentation for Environmental Engineering
4	PEIE-811D	Power Plant Instrumentation
5	PEIE-811E	Signal Conditioning and Data Acquisition
CORE ELECTIVE-2 (PEIE-812)		
Sr. No.	Subject Code	Subject Name
1	PEIE-812A	Random and Stochastic Processes
2	PEIE-812B	Energy Auditing and Management
3	PEIE-812C	Power System Stability and Control
4	PEIE-812D	Neuro Fuzzy Control
5	PEIE-812E	Optimization Techniques
CORE ELECTIVE-3 (PEIE 821)		
Sr. No.	Subject Code	Subject Name
1	PEIE 821A	Telemetry and Remote Control
2	PEIE 821B	Multi Range Signal Processing
3	PEIE 821C	Industrial Electronics
4	PEIE-821D	Industrial Internet of Things
5	PEIE-821E	Digital Signal Processor for Instrumentation
CORE ELECTIVE-4 (PEIE 822)		
Sr. No.	Subject Code	Subject Name
1	PEIE 822A	Optimal and Robust Control
2	PEIE 822B	Computational Electromagnetics
3	PEIE 822C	Control System Design
4	PEIE-822D	Intelligent Control
5	PEIE-822E	Machine Learning – An Approach to Artificial Intelligence
CORE ELECTIVE-5 (PEIE 911)		
Sr. No.	Subject Code	Subject Name
1	PEIE 911A	Microprocessor Applications in Instrumentation
2	PEIE 911B	Robotics Engineering
3	PEIE 911C	Opto Electronics and Instrumentation
4	PEIE-911D	System Identification and Parameter Estimation
5	PEIE-911E	Artificial Intelligence in Medical Diagnosis
OPEN ELECTIVE COURSE (OEIE-911)		
Sr. No.	Subject Code	Subject Name
1	OEIE-911A	Microcontroller and Embedded Systems
2	OEIE-911B/ PEIE-812B	Energy Auditing and Management

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3	OEIE-911C	Virtual Instrumentation and Data Acquisition
4	OEIE-911D	Industrial Safety
5	OEIE-911E	Soft Computing Techniques
6	OEIE-911F	Medical Image Processing
7	OEIE-911G	Solar and Wind Power Technologies
8	OEIE-911G	Instrumentation in Precision Agriculture

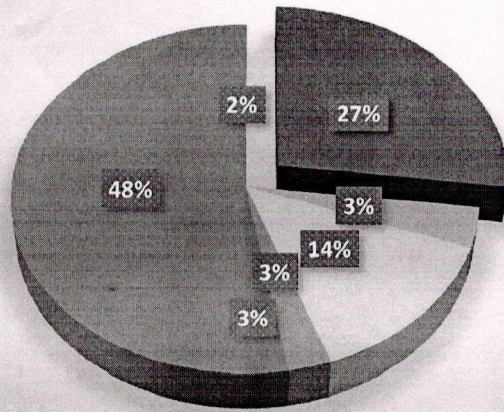
Sr. No.	Course Components	Total No. of Subjects	Curriculum Content (% of total number of credits of the program)	Total No. of Contact Hours	Total number of credits
1.	Engineering Core	8	30.88	29	21
2.	Audit Course	2	0	4	0
3.	Program Electives	5	22.05	15	15
4.	Compulsory Elective (RM)	1	2.94	3	3
5.	Open Electives	1	4.42	3	3
6.	Project	1	38.24	52	26
7.	Internship/Seminar/Industrial Training	1	1.47	2	1
		19	100	107	68



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Total No. of Contact Hours



- 1. Engineering Core
- 2. Audit Course
- 3. Program Electives
- 4. Compulsory Elective (RM)
- 5. Open Electives
- 6. Project

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